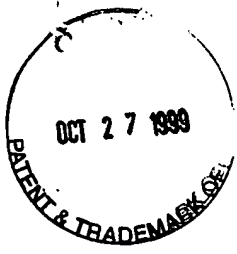


AFB/GALL
2767



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:) Attorney Docket No.: E-621

William Berson, et al) Group Art Unit: 2767

Serial No.: 08/886,516) Examiner: Todd Jack

Filed: July 1, 1997) Date: October 25, 1999

Title: METHOD OF PREVENTING COUNTERFEITING OF ARTICLES OF
MANUFACTURE

RECEIVED
OCT 29 1999
TECH CENTER 2700

TRANSMITTAL OF APPEAL BRIEF (PATENT APPLICATION 37 CFR 1.192)

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Transmitted herewith in **triplicate** is the **APPEAL BRIEF** in the above-identified patent application with respect to the Notice of Appeal filed on August 24, 1999,.

Pursuant to 37 CFR 1.17(f), the fee for filing the Appeal Brief is \$300.00

Please charge Deposit Account No. **16-1885** in the amount of \$300.00 to cover the above fee.


The Commissioner is hereby authorized to charge any additional fees which may be required to Deposit Account No. **16-1885**.

A duplicate copy of this transmittal is enclosed for use in charging the Deposit Account.

10/28/1999 RHAGAT 00000058 161885 08886516

01 FC:120 300.00 CH

Respectfully submitted,



Alberta A. Vitale
Reg. No. 41,520
Attorney of Record
Telephone (203) 924-3882

PITNEY BOWES INC.
Intellectual Property and
Technology Law Department
35 Waterview Drive
P.O. Box 3000
Shelton, CT 06484-8000

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

on October 25, 1999
Date of Deposit

Alberta A. Vitale
Name of Registered Rep.



Signature

October 25, 1999
Date



#9
KW
11-01-99
PATENT 10/3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:) Attorney Docket No.: E-621
William Berson, et al) Group Art Unit: 2767
Serial No.: 08/886,516) Examiner: Todd Jack
Filed: July 1, 1997) Date: October 25, 1999
Title: METHOD OF PREVENTING COUNTERFEITING OF ARTICLES OF
MANUFACTURE

APPELLANT'S BRIEF

Box AF
Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

This brief is in furtherance of the Notice of Appeal filed in this case on August 24, 1999.

This brief is transmitted in triplicate.

RECEIVED
OCT 29 1999
TECH CENTER 2700

TABLE OF CONTENTS

This brief contains these items under the following headings and in the order set forth below:

- I. REAL PARTY IN INTEREST
- II. RELATED APPEALS AND INTERFERENCES
- III. STATUS OF CLAIMS
- IV. STATUS OF AMENDMENTS
- V. SUMMARY OF INVENTION
- VI. ISSUES PRESENTED FOR REVIEW
- VII. GROUPING OF CLAIMS
- VIII. ARGUMENTS

Appendix A

I. REAL PARTY IN INTEREST

Pitney Bowes Inc., a Delaware corporation having its principal place of business in Stamford, Connecticut, is the real party in interest by way of assignment from the Appellant.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A.) Claims 1-3 and 5-11 are pending.

B.) Claims 1-3 and 5-11 are on appeal.

The currently pending claims are attached as Appendix A.

IV. STATUS OF AMENDMENTS

Appellant received a Final Office Action dated May 24, 1999, rejecting claims 1-3 and 5-11. Appellant filed Notice of Appeal on August 24, 1999.

V. SUMMARY OF INVENTION

A. INTRODUCTION

The subject invention relates to labeling of articles. More particularly, it relates to a method for labeling articles of manufacture to identify their source and prevent counterfeiting. The Method provides a high degree of confidence in the authenticity of the label.

B. BACKGROUND

Counterfeiting and forgery of goods are well known problems. Manufacturers of luxury goods such as watches, luggage, perfume, etc. must constantly deal with counterfeiters who produce cheap imitations. Even inexpensive goods such as T-shirts can acquire considerable cachet, and associated high markup, by being marked with the image of a famous cartoon character, or other valuable, proprietary logo.

While the counterfeiting of consumer goods or other articles of manufacture thus represents a problem which is probably comparable to problems associated with the counterfeiting of documents which represent value (e.g., currency), until recently no comparable efforts have been made to combat this problem. While there is a long history of techniques such as elaborate engraving and use of special paper stocks to prevent counterfeiting of currency, in general, similar efforts have not been used even for the most expensive luxury goods.

An approach which has been used to combat counterfeiting of documents is the use of encryption. One method is encrypting information extracted from a document and imprinting the document with the encrypted information in order to verify the

information contained in the document. Similarly with another method a document is scanned to produce a digital signal which is compressed, encrypted, and coded as a two dimensional bar code, which is incorporated into a label which is affixed to the document.

While these and other similar methods have been useful for their intended purpose, that purpose has been limited to the verification of the information content of a document. In general, those who use such techniques either are not concerned that the information be duplicated so long as it is not altered, or, as with currency, are willing to rely on other techniques to detect duplication. Since much of the value of the sort of articles of manufacture which are likely to be counterfeited inheres in the fact that each particular item is essentially indistinguishable from other items of the same type, there has been, to Appellant's best knowledge, no previous attempt to use encryption techniques to verify the source of articles of manufacture.

Another related use of encryption relates to the identification of individuals. The method describes an identification card which includes an encrypted representation of a biometric characteristic of an individual to be identified (e.g., a fingerprint or facial image). This encrypted representation is decrypted and compared to the individual. Again, since articles of manufacture which are likely to be counterfeited in general do not have distinguishing characteristics, Appellant believes that there has been no effort to apply such techniques to the problem of verifying the source of an article of manufacture. Even if an article includes a unique marking such as a serial number, in general there is no convenient way to determine if the serial number is original or a duplication. (Page 1, line 1 to Page 2, line 23 of the specification).

B. APPELLANT'S VALUABLE EQUIPMENT SECURITY METHOD

Appellant's invention is a method for verifying the source of an article of manufacture. A label having information relating to the article is prepared and digitally signed or otherwise encrypted to authenticate the information. The label and a tangible representation of the digital signature or other encrypted information are then securely associated with the article. The information relating to the article can include verifying information such as an expiration date, unique identification of the article, identification of an authorized provider of the article or a description of the article to protect against unauthorized use of duplicate labels. The label can also include an unreproducible pattern such as a pattern of magnetic fibers randomly distributed and embedded in the label and a digitally signed description of the pattern. The unreproducible pattern could alternatively be produced by spattering ink or paint drops.

Appellant's use of the term "label" includes not only conventional labels which are glued or otherwise affixed to an article but also includes the marking which is associated with the article and which is sufficiently likely to remain associated with the article through the period of interest. For example, the label for an expensive watch or piece of jewelry may be engraved on the article itself, while the label for a relatively inexpensive appliance may be printed on the shipping carton.

Appellant's use of the term "securely associating" means that the article, label, and the tangible representation of the encrypted information are associated in a manner such that the likely expense and difficulty of trying to separate and reuse the label and tangible representation will exceed any benefit which can be obtained thereby.

In accordance with one aspect of the subject invention, the information included on the label includes verifying information, such as expiration date, a particularly identification of the article such as a serial number, an identification of an authorized provider of the article, or a description of the article, while protecting against unauthorized use of duplicate labels.

In accordance with another aspect of the subject invention, the label includes an unreproducible pattern (such as randomly distributed magnetic fiber or unreproducible paint or ink spatters) and the method includes the further step of including an encrypted description of the unreproducible pattern with the encrypted information.

In accordance with another aspect of the subject invention, the encrypted information is encrypted with a private key of a public/private key pair and the corresponding public key is available to parties who wish to validate the source of the article. (Page 3, line 1 to Page 4, line 9 of the specification).

VI. ISSUES PRESENTED FOR REVIEW

- 1) Whether the rejection of claims 1, 2 10 and 11 (claim group 1) under 35 USC §103(a) as being anticipated by Moore in view of Salive was proper?
- 2) Whether the rejection of claim 3 (claim group 2) under 35 U.S.C. §103(a) as being anticipated by Moore in view of Salive and that which is well known in the art, was proper?
- 3) Whether the rejection of claim 5 (claim group 3) under 35 U.S.C. §103(a) as being anticipated by Moore in view of Salive, et al, further in view of Huddleston was proper?

- 4) Whether the rejection of claims 6-9 (claim group 4) under 35 U.S.C. §103(a) over Moore in view of Salive, further in view of Pastor was proper?

VII. GROUPING OF CLAIMS

- A. Claim Group 1 contains claims 1, 2, 10 and 11 which stand or fall individually with regard to the rejections under 35 USC §103(a).
- B. Claim Group 2 contains claim 3.
- C. Claim Group 3 contains claim 5.
- D. Claim Group 4 contains claims 6-9, which stands or falls together with regard to the rejection under 35 USC §103(a).

VIII. ARGUMENTS

A. Introduction

In a Final Office Action, mailed May 24, 1999, the Examiner finally rejected claims 1-2 and 10-11 under 35 U.S.C. §103(a) as being unpatentable over Moore in view of Salive; claim 3 under 35 USC §103(a) as being unpatentable over Moore in view of Salive, further in view of that which is well known in the art; claim 5 under 35 USC §103(a) as being unpatentable over Moore in view of Salive et al, further in view of Huddleston; and claims 6-9 under 35 USC §103(a) as being unpatentable over Moore in view of Salive, further in view of Pastor.

1. Summary of Moore

Moore, issued January 7, 1997 and titled ANTI-COUNTERFEITING SYSTEM is related to authenticating, anti-counterfeiting and anti-diversion tracking system. More particularly Moore is directed to an authenticating, tracking/anti-diversion and anti-counterfeiting system that can track various goods. (Col. 3, 20-55). An identifiable mark is placed on the goods, or on material out of which goods are to be made, which enables subsequent inspection. The goods can be field inspected with a field reader to determine authenticity. The markings are created using dyes that upon exposure to certain frequencies of visible or non-visible light become detectable. The marking can be a logo or brand identifier and can include encoded data in an ID Matrix format. The encoded data can include information such as a lot number, manufacturer identification, particular market destination (i.e. country or state), a product identifier, a company identifier, and time date and place of manufacture. (Col. 12, lines 29-45).

2. Summary of Salive, et al

Salive et al. issued on March 4, 1997 and titled METHOD OF IDENTIFYING A PLURALITY OF LABELS HAVING DATAFIELDS WITHIN A MACHINE READABLE BORDER is directed to automatic identification and location-tracking system for multiple objects such as logs, where each log is affixed with a label. Salive et al. capture data from multiple articles at one time. The entire captured image is analyzed in order to locate each label in the image.

(Col. 1, lines 35 to Col. 2 line 29, and Col. 4, lines 44-60). The captured image is transmitted to a remote station for storage and subsequent analysis. (Col. 5, lines 8-12).

3. Summary of Huddleston

Huddleston, issued October 31, 1972 and titled GARMENTS WITH DETACTABLE MARKS is directed to garment manufacturing and in particular to providing garment parts with detectable marks for the actuation of various garment fabricating steps. The use of the magnetized thread enables machines to sense the presence of the thread and perform cutting, folding or stitching as may be desired, thus reducing the manual steps and providing precisely manufactured garments. (Col. 3, lines 52-64).

4. Summary of Pastor

Pastor, issued August 14, 1990 and titled ELECTRONIC INDICIA IN BIT MAPPED FORM is related to electronic postage meters and in particular to providing validation of payment of postage on a mailpiece by using encrypted data in the postage indicia. The postage indicia includes an array of pixels which represent encrypted information. The encryption may be performed using public key encryption system. (Col. 2, lines 31-60).

B. Whether the rejection of claims 1, 2, 10 and 11 (claim group 1) under 35 USC §103(a) as being anticipated by Moore in view of Salive was proper?

Claim 1

Independent Claim 1 is drawn to a method for verifying the source of an article of manufacture, said method comprising the steps of: a) preparing a label, said label comprising an **unreproduceable pattern and information relating to said article**; b) **describing said unreproduceable pattern and including said description** with said information relating to said article; c) **encrypting at least a portion of said information** relating to said article; d) **securely associating** said article, said label, and a tangible representation of said encrypted information.

The remarks of the Final Office Action state that Moore's "printed object is unreproduceable without the proper key and/or frequency of light." Thus, logic would follow that the converse is true that the printed object is reproducible with the proper key and or/frequency of light. This reproducibility is a weakness in Moore's anti-counterfeiting system. Moore's printed object or marking are hidden and could be copied onto another item if a counterfeiter knew the proper dye and the proper frequency of light to read the dye. Moore does not teach the dye and light to be unobtainable; in fact, Moore teaches the use of UV and IR light [col. 19, line 20 to col. 20, line 21-38] and the use of an dye which is compatible with the selected light wavelength [col. 21, line 25]. These items are available in commerce and therefore, Moore's printed object is reproducible. However, Appellant's label is not reproducible

because Appellant has solved the counterfeiting problem by providing an **"unreproducible pattern"** on a label and also including on the label information such as **"encrypting at least a portion"** of information **"describing the unreproducible pattern"**. Thus, in order to verify Appellant's label, the unique pattern is read, the representation is read and decrypted and the decryption is compared to the unique pattern for a match. Because of this, Appellant's invention provides that there is a very high degree of confidence of the authenticity of the label. By this analysis it is clear that Moore's reproducibility teaches away from Appellant's unreproducible claimed invention. Teaching away is an indication of nonobviousness. For these reasons, Moore does not teach Appellant's invention.

Furthermore, Moore in view of Salive does not teach Appellant's label. Salive adds nothing to Moore that would support the obviousness rejection. The code of Salive's label is not **unreproducible** and is not **encrypted**. Salive's label is not **securely associated** with an article. This is not surprising since Salive is not directed towards Appellant's problem of preventing counterfeiting. Salive solves the problem of capturing data (such as label information), from multiple articles (such as logs affixed with labels), in a single operation. [Col. 1, lines 15-20].

For the above stated reasons, Moore in view of Salive do not teach Appellant's claim 1 **"method for verifying the source of an article of manufacture, said method comprising the steps of : . . . preparing a label, said label comprising an unreproducible pattern; and describing said unreproducible pattern and including said description with said information relating to said article; encrypting at least a portion of said information relating to said article . . .**

securely associating said article, said label and a tangible representation of said encrypted information.”

Claim 2

For the same reasons as the reasons stated above regarding claim 1, Moore in view of Salive do not teach dependent claim 2 which claims “**label includes verifying information for protection against unauthorized use of duplicate labels.**” Furthermore, Moore in view of Salive et al. do not teach the use of verifying information for the protection against unauthorized use of duplicate labels.

Claims 10

For the same reasons as the reasons stated above regarding claim 1, Moore in view of Salive do not teach claim 10 which claims “**providing a label for said article, said label having an unreproducible pattern; scanning said label to generate a signal representative of said unreproducible pattern; encrypting at least a portion of said signal; securely associating a tangible representation of said encrypted portion of said signal, said article and said label.**”

Claim 11

For the same reasons as the reasons stated above regarding claim 1, Moore in view of Salive do not teach claim 11 which claims “**verifying a label . . . comprising the steps of . . . scanning said label . . . decrypting . . . and comparing said decrypted portion . . . with said corresponding encrypted portion . . . to verify said label**”. Furthermore, Moore in view of Salive do not teach scanning, decrypting and comparing to verify a label.

Conclusion

For all of the above stated reasons, Appellant respectfully requests that claims 1, 2, 10 and 11 be allowed.

C. Whether the rejection of claim 3 (claim group 2) under 35 U.S.C. §103(a) as being anticipated by Moore in view of Salive and that which is well known in the art, was proper?

Claim 3 was rejected under 35 USC §103(a) as being unpatentable over Moore in view of Salive as applied to claim 1, further in view of that which is well known in the art. Dependent claim 3, claims **“verifying information includes information consisting of: an expiration date, a unique identification of said article of manufacture, an identification of a provider of said article of manufacture, or information describing said article of manufacture”**. Moore in view of Salive do not teach **encrypting information** said information including **“information consisting of: an expiration date, a unique identification of said article of manufacture, an identification of a provider of said article of manufacture, or information describing said article of manufacture”**. The position cannot simply be taken that use of expiration date, unique identification, identification of a provider or information describing an article in the context of encryption as in the claimed invention is well known in the art with respect to Appellant's claimed invention. Rather, as a matter of law a reference must be provided which teaches or suggests the use of such features in the context of the claimed invention. Since the combined references do not provide the teaching,

suggestion or motivation for Appellant's claimed invention, Appellant requests that claim 3 be allowed.

D. Whether the rejection of claim 5 (claim group 3) under 35 U.S.C. §103(a) as being anticipated by Moore in view of Salive, et al, further in view of Huddleston was proper?

For the same reasons stated above regarding claim 1, a prima facie case of obviousness has not been made for claim 5 and claim 5 should be allowed. Additionally, Moore in view of Salive further in view of Huddleston does not render the present invention obvious because: (1) Huddleston is non-analogous art and therefore cannot serve as a prior art reference against the present invention; and (2) Huddleston does not contain any teaching or suggestion of the features of the present invention as claimed. Generally, this issue of whether art is analogous turns on whether the inventor of the present invention "[w]ould reasonably be motivated to go to the field in which the Examiner found the reference in order to solve the problem confronting the inventor." In Re Oetiker, 24 U.S.P.Q.2d 1443, at 1446 (Federal Circuit 1992). To qualify as analogous art, a reference must satisfy a two part test and must be: (1) within the inventor's field of endeavor and (2) prudent to the inventor's particular problem. Huddleston does not pass the two part test; the reasons are set out as follows:

First, Huddleston is not related to the inventors field of endeavor. Huddleston relates to the field of garment fabrication. More particularly, Huddleston is directed to methods for manufacturing garments using magnetic markings and detecting the magnetic marking and performing automated cutting, stitching and folding of garments at the magnetized portions. See Huddleston column 3, lines 53-64. From this description, it is clear Huddleston relates to mass fabrication of garments. Huddleston does not address providing secure labels. On the other

hand, the present invention relates to preventing counterfeiting of articles by providing unique, unreproducible markings with the secure labels. *Second, Huddleston is not pertinent to the inventor's particular problem.* Huddleston addresses the problem of actuating garment manufacturing by providing machine readable markings. On the other hand, the present invention relates to providing secure labeling to reduce counterfeiting.

For the above stated reasons, Appellant would not have reasonably went to the garment manufacturing art to solve Appellant's problem. Thus, Huddleston fails the two part test. Huddleston is nonanalogous art and Appellant respectfully request that rejection based upon Moore in view of Salive further in view of Huddleston be withdrawn and claim 5 be allowed.

Assuming arguendo, that Huddleston is analogous art, for the same reasons as stated in section B above regarding claim 1 from which claim 5 depends, Moore in view of Salive and further in view of Huddleston do not teach the invention of claim 5. A general description of the novel features of claim 5 includes an **unreproducible pattern** and an **encrypted portion** which includes information from the unreproducible pattern. Appellant's claimed invention combines an unreproducible pattern and encryption to produce a label that cannot be reproduced without extraordinary effort. At least a portion of the unreproducible pattern is encrypted. The combination of the uniqueness of the label and the security of the encryption are novel.

Huddleston does not add to Moore in view of Salive for the reasons explained below:

Huddleston's magnetic fibers are reproduced over and over again as illustrated in Huddleston's "stack 10 of waistband panels" where each thread 15 in each waistband panel is treated with liquid which contains particles of iron oxide. Each treatment is in the same place on the waistband so that quantities of the articles can be more precisely manufactured [Col. 1 lines 10-15; col. 2 lines

24-50]. Appellant's unreproducible pattern which could be, for example, magnetic fiber which is described in the specification as being randomly distributed [page 6, lines 1-5] which is why it is a pattern which can not be reproduced without "extraordinary effort" [page 6, line 4].

Regarding the remarks in the Final Office Action that "both inventions possess secure labels-only being removed with the application of solvent or non-ordinary action." Appellant submits that for the above stated reasons, that even assuming arguendo that the inventions were similarly secure, Appellant's label is unreproducible unlike the cited art. Even the most secure label, which cannot be removed, does not provide protection against counterfeiting if it can be reproduced and placed on a counterfeit article.

Therefore, Appellant respectfully request that rejection based upon Moore in view of Salive further in view of Huddleston be withdrawn and claim 5 be allowed.

E. Whether the rejection of claims 6-9 (claim group 4) under 35 U.S.C. §103(a) over Moore in view of Salive, further in view of Pastor was proper?

Claims 6-9 were rejected under 35 USC §103(a) as being unpatentable over Moore in view of Salive, further in view of Pastor. For the reasons stated above for independent claim 1 from which claims 6-9 depend, claims 6-9 should be allowed. Furthermore, regarding the Pastor reference, Pastor does not teach the use of **public/private keys** in the context of the claimed method for verifying the source of an article of manufacture. Rather, Pastore uses public key encryption in a postage indicia printed with an electronic postage meter. Even assuming arguendo that the references did teach aspects of Appellant's claimed invention, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching, suggestion or

incentive supporting the combination. There is no teaching suggestion or incentive to combine Moore which is directed to marking goods with dye, Salive which is directed to reading multiple labels in a single operation, and Pastore which is directed to encrypted postage indicia. Each reference is vastly different and one of ordinary skill in the art would not be prompted to combine the references to arrive at Appellant's invention.

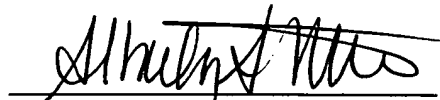
Again, assuming arguendo that Moore in view of Salive et al. further in view of Pastore were combinable as applied to claims 6-9, Pastore is nonanalogous art since Pastore is drawn to 1) a different field and 2) a different problem than Appellant invention. Appellant's claims are drawn to the field of unreproducible labels whereas Pastore is drawn to the field of postage indicia. Appellant teaches a method of verifying the source of an article of manufacture whereas Pastore teaches producing a postage indicia. Pastor's problem is that payment of postage needs verification. In contrast, Appellant's problem is that articles of manufacture can be counterfeited. Thus, since Appellant's invention is directed to a different field and a different problem, Pastore is nonanalogous art.

For all of the above stated reasons, Appellant respectfully requests that the obviousness rejection be withdrawn and that claims 6-9 be allowed.

G. Conclusion

Based on the above reasoning, the Examiner's 35 USC §103(a) rejection of claims 1-3, 5-11 was improper and should accordingly be reversed by the Board of Patent Appeals and Interferences. Since this is the only outstanding issue with respect to the claims, Appellants pray for a favorable ruling and a recommendation that all claims are in condition for allowance.

Respectfully submitted,



Alberta A. Vitale
Reg. No. 41,520
Attorney of Record
Telephone (203) 924-3882

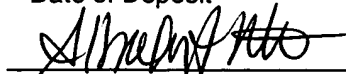
PITNEY BOWES INC.
Intellectual Property and
Technology Law Department
35 Waterview Drive
P.O. Box 3000
Shelton, CT 06484-8000

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

on 10.25.99
Date of Deposit


Signature

Alberta A. Vitale
Name of Registered Rep.

10.25.99
Date

APPENDIX A

1. A method for verifying the source of an article of manufacture, said method comprising the steps of:

a) preparing a label, said label comprising an unreproducible pattern and information relating to said article;

b) describing said unreproducible pattern and including said description with said information relating to said article;

c) encrypting at least a portion of said information relating to said article;

d) securely associating said article, said label, and a tangible representation of said encrypted information.

2. A method described in Claim 1 wherein said information included on said label includes verifying information for protecting against unauthorized use of duplicate labels.

3. A method as described in Claim 2 wherein said verifying information includes information consisting of: an expiration date, a unique identification of said article of manufacture, an identification of a provider of said article of manufacture, or information describing said article of manufacture.

5. A method as described in Claim 1 wherein said unreproducible pattern is formed from magnetic fibers embedded in said label.

6. A method as described in Claim 1 wherein said encrypted information is encrypted with a first private key of a first public/private key pair and a corresponding first public key is available to parties who wish to validate the source of said article.

7. A method as described in Claim 6 wherein a trusted third party provides a party producing said label with said first private key and with an encryption of said first public key by a second private key kept secret by said trusted third party, said producing party including said encryption of said first public key with said label and said trusted third party providing a corresponding second public key to parties who wish to verify the source of said article; whereby said parties can recover said first public key from said label so that articles from a large number of different sources can be verified without the need to maintain a corresponding database of public keys.

8. A method as described in Claim 1 wherein said encrypted information is encrypted with a first private key of a first public/private key pair and a corresponding first public key is available to parties who wish to validate the source of said article.

9. A method as described in Claim 8 wherein a trusted third party provides a party producing said label with said first private key and with an encryption of said first public key by a second private key kept secret by said trusted third party, said producing party including said encryption of said first public key with said label and said trusted third party providing a corresponding second public key to parties who wish to verify the source of said article; whereby said parties can recover said first public key from said label so that articles from a large number of different sources can be verified without the need to maintain a corresponding database of public keys.

10. A method for labeling an article, said method comprising the steps of:

- a) providing a label for said article, said label having an unreproduceable pattern;
- b) scanning said label to generate a signal representative of said unreproduceable pattern;
- c) encrypting at least a portion of said signal;
- d) securely associating a tangible representation of said encrypted portion of said signal, said article and said label.

11. A method for verifying a label, said label having an unreproducible pattern, and a tangible representation of at least an encrypted portion of a signal description of said unreproducible pattern being securely associated with said label, said method comprising the steps of:

- a) scanning said label to generate a second signal descriptive of said unreproducible pattern;
- b) reading said tangible representation to recover said encrypted portion of said descriptive signal;
- c) decrypting said encrypted portion, or encrypting a corresponding portion of said second signal; and
- d) comparing said decrypted portion of said descriptive signal with said corresponding portion of said second signal, or comparing said encrypted portion of said descriptive signal with said corresponding encrypted portion of said second signal, to verify said label.